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REMARKS

Claims 1-19 are herewith canceled without prejudice or disclaimer as to the subject matter thereof; claims 20-36 stand rejected; independent claims 20, 31 and 32 are herewith amended and no new claims are added. Thus, claims 20-36 are pending continued examination on the merits.

In addition the Examiner objected to a misspelled word in the drawings (FIG. 6F), requested that the related case information on page 1 of the specification be updated, and noted a misspelled word on page 16 of the specification.

Applicants respectfully solicit entry and favorable consideration of the amendments and remarks presented herewith.

Claim Rejections Under 35 U.S.C. §102

Claims 20-36 are rejected as anticipated by various (single) references; namely, Holmstrom (EP '577 Application), Hartlaub ('470 patent), Obel et al. ('428 patent), and Sweeney et al. ('377 patent).

Regarding Holmstrom, which is applied against claims 20, 22-24, 26-28 and 31-36. For this ground of rejection to successfully apply, then Holmstrom must disclose each and every claim limitation recited. Applicants respectfully suggest that the claims as amended recite sufficient structure not found expressly or via inherency in Holmstrom. Furthermore, among other differences Holmstrom addresses atrial arrhythmias and do not provide for spinal cord stimulation. As such, Holmstrom cannot be said to support the present rejection and the rejection should be withdrawn.

Regarding Hartlaub, which is applied against claims 20, 22-24, 26 and 29-36. For this ground of rejection to successfully apply, then Hartlaub must disclose each and every claim limitation recited.

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Applicants respectfully suggest that Hartlaub is directed only in a general sense to toward the notion of applying closed loop spinal cord stimulation (SCS) to minimize the impact of a cardiac insult. For example, as recited by Hartlaub:

The implantable heart monitor is adapted to detect the occurrence of tachyarrhythmias or of precursors thereto and in response, trigger the operation of the spinal cord stimulator in order to prevent occurrences of tachyarrhythmias and/or as a stand-alone therapy for termination of tachyarrhythmias and/or to reduce the level of aggressiveness required of an additional therapy such as antitachycardia pacing, cardioversion or defibrillation. (emphasis added.)

That is, Hartlaub fails to mention or even contemplate the subject matter claimed herein and thus Hartlaub fails to anticipate the claimed subject matter. In support of this proposition Applicants respectfully point out that the independent claims each recite a limitation regarding the applied therapy (i.e., claim 1: "based on anticipation of an occurrence of a cardiac insult;" claim 31: "based on an indication of a probable future cardiac insult" and claim 32: "for a period of time prior to onset of a cardiac insult").

Regarding Obel, entirely fails to mention or refer to "cord" (much less a "spinal cord" or spinal cord "stimulation"). For example, the Abstract of Obel provides the following:

A method and apparatus for stimulating the right and/or left carotid sinus nerves or the right stellate ganglion or the epidural space at about T_{sub}2 with continuous and/or phasic electrical pulses in response to detected myocardial ischemia to decrease cardiac workload as a method to protect the myocardium.

Applicants respectfully suggest that given the complete absence of the anatomy and approach specifically claimed in the pending claim set, the rejection grounded in Obel cannot stand and should be withdrawn.

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Regarding Sweeney, like Obel Sweeney entirely fails to mention or refer to "cord" (much less a "spinal cord" or spinal cord "stimulation"). Therefore, for the same reasons the other similarly defective rejections should be properly withdrawn, Applicants respectfully suggest that given the complete absence of the anatomy and approach specifically claimed in the pending claim set, the rejection grounded in Sweeney cannot stand and should be withdrawn.

Objections

Objections to the specification and drawings were raised and are herewith addressed (i.e., pages 1 and 16 amended and new FIG. 6F submitted) and thus said objections should be rendered moot.

Conclusion

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned attorney to attend to these matters.

Respectfully submitted,

Hill et al. by their attorney

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Date


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